Master's Thesis

Universal Healthcare: A Path to Health Equity in the United States

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Abstract

Health equity and social determinants of health are important concepts to understand when forming health policy in the United States. Health equity refers to a state of health and wellbeing that is not differentiated between groups based on marginalized status or history of oppression. Social determinants of health, perhaps more correctly called structural determinants of health, provide a framework for understanding how race and racism, socioeconomic status (SES), gender and sexuality, and other societal (as opposed to biological) factors influence health and the unequal burden of disease. Vast health disparities between Black and White Americans have been widely reported, although the link between health status and racism is not as commonly articulated. An abundance of studies have linked health insurance status to improved physical and mental health. While universal health insurance cannot overcome racism as a fundamental cause of health disparities, it would ameliorate the effects of living in a profoundly racist society. In order to advance health equity in the United States, legislators should make health insurance free and accessible to all.

Introduction

Foundational human rights texts proclaim, *Health is a human right*. From the Constitution of the World Health Organization (WHO), and WHO's Declaration of Alma Ata, to the United Nations, leaders across the world proclaim the importance of health and healthcare.[1] The United States, contrary to its peer nations, has failed to establish a national health insurance program. Although powerful fundamental causes like socioeconomic status (SES) and racism cannot be overcome with policy changes alone, establishing universal healthcare would help

[1] WHO 1946; WHO 1978; UN 2021

ameliorate centuries of American racial oppression and redress the health disparities caused by racism.

The United States, as a nation, only came into being because of slave labor and violent dispossession of indigenous peoples. The deep-rooted oppression central to the growth and power of the US continues to be borne out in the vast disparities experienced by Americans, especially in relation to health. Health disparities are not equivalent to simple differences in health within and across the American population. Health disparities result from unequal, unjust exposure to social and environmental factors.[2] Public health professionals working for health equity seek to remedy disparities by highlighting structural, institutional, and environmental factors that lead to health disparities and by proposing interventions aimed at improving the health of the marginalized. Achieving health equity would mean addressing the unequal burden of illness in the United States.

The experience of health does not exist separately from the experience of one's race, socioeconomic status, gender, physical ability, or other attributes of lived experience, often collectively referred to as social determinants of health. These characteristics interact with societal structures to affect one's health. Often, health is linked to demographics as if the identity itself is a cause of health disparities or poor health, when really the functioning of society to uphold the status quo and prioritize extant social structure means that people in a social position of less power will face blocks to achieving or maintaining optimal health.

One way to realize health equity is to improve access to healthcare in the form of health insurance. This research report explores the connection between racism, health disparities, and access to healthcare. Studies show that access to health insurance is correlated with better

[2] APHA n.d.

physical and mental health, longer life expectancy, and less medical debt and poverty.[3] I analyze contemporary scholarship to show how universal health insurance can help shift American society away from perpetuating health disparities and towards equity in health. I argue that having health insurance is connected to better health outcomes, and that creating a single-payer, government-run health insurance program for all residents of the United States will lessen health disparities. With national health insurance, rather than worrying about insurance being accepted at a doctor's office, cost-sharing expenses, obtaining referrals, and finding in-network specialty providers, people will be able to focus on meeting their health needs. This research report explains the framework of health equity and how it intersects with racism, situates this framework within the history of health insurance in the US, and analyzes current costs of obtaining health insurance and how these costs are unevenly distributed along racial lines. My research leads to a discussion of the costs of universal health insurance and concludes with a proposed model of health in an antiracist society.

Background

History of Health Reform

After World War II, Western consensus emerged that identified health and healthcare as a fundamental human right. European countries moved to implement national health insurance programs that would provide affordable and appropriate care. American opposition to national health insurance has roots in the Red Scare of the earlier 20th Century; in response to fighting Russia in World War I and the rise of the Bolsheviks, American culture rejected communalism in all forms. President Roosevelt was able to effect some social protections in the New Deal, specifically Social Security Insurance and labor protections for some workers, but securing

[3] Gotanda et al. 2020; Kominski et al. 2017; Lantz and Rosenbaum 2020; Sommers et al. 2017

universal healthcare coverage was elusive. The concurrent rise of the hospital insurance and the still ingrained belief that hospitals were places people go to die translated to a lack of public support for hospital insurance. Primary care doctors were just becoming professionalized and their lobby was extremely effective at opposing national health insurance. Presidents Truman, Kennedy, Johnson, Nixon, and Clinton attempted some form of universal healthcare legislation – but all failed at providing coverage for the whole population.[4] Access to primary healthcare in the United States remained limited until the passage of Medicare and Medicaid in 1965, and then the Affordable Care Act in 2010.

Health Equity and Health Disparities

Health disparities are not the same as health differences across a population. Health disparities result from unequal, unjust exposure to social and environmental factors, and are deeply related to one's position in society.[5] Central to the concept of health disparities is that the social position of a whole group – specifically an oppressed or marginalized social position – is what drives the disparity. Braveman et al.'s 2011 definition states, "Health disparities are systematic, plausibly avoidable health differences adversely affecting socially disadvantaged groups." Disparities are unfair, unjust, unnecessary, and avoidable.[6] Health inequity is rooted in structural racism and the unequal distribution of social and economic resources, as well as increased health risks associated with exposure to environmental toxins.[7] From chronic illnesses like heart disease to maternal morbidity and mortality, Black and Brown Americans experience worse health outcomes. Groups who face more oppression, marginalization, dispossession, and state violence often have worse health, but public policy has thus far been ineffective at

[4] Brown 2021
[5] APHA
[6] Braveman 2006
[7] APHA

rectifying health disparities. Phelan and Link (2015) cite several articles showing that health disparities exist between Black and White Americans even when controlling for SES, which is a main driver of disparities.

Clear definitions are necessary to craft public policy that is effective in its goals of achieving health equity and lessening health disparities. The difference between equity in *health* and equity in *healthcare* may seem semantic, but actually has implications for research, funding, and policy. Braveman (2006) summarizes major conceptualizations of equity, describing how they differ.

Equity in Health	Equity in Healthcare
Health equity seeks to lessen "avoidable disparities in health and its determinants" between groups with different social position. (Murray et al., WHO)	Policymakers must differentiate between horizontal equity (equal treatment for equal needs) and vertical equity (different treatment for different needs). (Mooney)
Differences relevant to health equity are "systematic," not arbitrary. (International Society for Equity in Health)	Health needs should determine access to health-related resources and access to care. (Aday)
"All persons [should] have fair opportunities to attain their full health potential." (Whitehead)	Care should be considered along four axes: utilization, distribution, access, and health outcomes. (Culyer and Wagstaff)

Table 1: Equity in health compared to equity in healthcare.

Whitehead's definition of health equity harkens back to WHO's definition in its 1946 Constitution: "Health is a state of complete physical, mental and social well-being and not merely the absence of disease or infirmity. The enjoyment of the highest attainable standard of health is one of the fundamental rights of every human being without distinction of race, religion, political belief, economic or social condition."[8] Understanding that striving for the "highest attainable standard of health" is a fundamental right for all humans is a major driver of

[8] WHO 1946

public health organizations today, including the American Public Health Association and elite schools of public health.

Braveman points to a conflict that has occurred within major health organizations, including WHO and Centers for Disease Control (CDC), regarding whether health equity (or health inequality) is defined as between groups with similar demographics, such as gender or sex, race, and location, or only between individuals. The problem with not comparing groups, and with not specifying explicitly that groups should be compared on the basis of social standing, is that two similarly-advantaged groups may experience different health or healthcare, but unless there is a distinct difference in power or privilege, the difference is simply a difference, and not an equity issue.[9] Differing incidence rates of death or illness among people living in different geographic areas may be of interest to public health researchers, but would not be an issue of *health equity* if both populations are of the same or similar social standing. The increased rate of suicide among White men in the US is interesting for public health, social scientists, and demographers, but it is not a *health equity* issue. Health disparities are related to social inequities. To address health equity by addressing health disparities, researchers first must show that the disparity is avoidable and can be reduced by public policy interventions, and then must show a causal pathway linking the disparity with disadvantaged social position.[10] This connection from social position to health disparity itself sets up a path through which health equity interventions can travel.

Braveman (2006) ultimately defines health disparities as "systematic, potentially avoidable differences in health – or in the major socially determined influences on health – between groups of people who have different relative positions in social hierarchies according to

[9] Braveman 2006
[10] Braveman et al. 2011

wealth, power, or prestige." She continues, "pursuing health equity [means] striving for equal opportunities for all social groups to be as healthy as possible." Integral to the definition of health equity is that we seek to study the causes of health disparities.

Perhaps even more so than health equity and health disparities, the concept of healthcare is considered fully understood – but our shared language may be pointing to different meanings. Before patients, providers, payors, and policymakers can talk about meaningful change to healthcare systems, we must come to a common definition of what *healthcare* means. The WHO defined health as "a state of complete physical, mental and social wellbeing, and not merely the absence of disease or infirmity."[11] The WHO's 1978 Declaration of Alma Ata focused on the importance of primary health care and was posed to change the way people accessed care and maintained or improved their health. "Governments have a responsibility for the health of their people," the drafters wrote. Primary health care should be based in "practical, scientifically sound and socially acceptable methods and technology"; reflect local cultural habits and healing practices; be integrated with "functional and mutually supportive referral systems"; rely on and make use of local natural resources, including community health workers; and be universally accessible.

But the American public has been resistant to adopting universal healthcare. Polls testing the favorability of healthcare have shown that when free or single-payer, universal health insurance is proposed, the level of support differs dramatically by language used.[12] To address health disparities, American society must share language around healthcare – and around racism.

[11] WHO 1946
[12] KFF 2020

Race – Or Racism?

Racial inequities in health are well-documented, but consensus on the cause of these inequities has not been reached. Researchers, policymakers, educational institutions, hospital systems, healthcare providers, and municipal departments of health have been hesitant to trace race-based health inequities back to racism.[13] Society cannot understand and address the social determinants of health that lead to racialized disparities without understanding the process of racism in society, i.e. the culture of racism.[14] Race becomes a proxy for different outcomes by racism and the cumulative effects of a lifetime of living under structural racism. Public health professionals will fail at addressing health disparities if the focus of research and policymaking remains on race instead of racism and racist institutions.

Health equity necessarily involves an explicit social justice dimension. Braveman et al. (2011) argue that public health practitioners cannot define health equity and health disparities without defining social disadvantage, because the focus is not only differences in health, but how social position is correlated to differences in health. But the authors' discussion of social position and disadvantage glosses over the systems and structures that enforce racist policies and perpetuate oppression, never explicitly naming racism. (A search of the article text shows only one instance of the word "racism": their citation of Camara Jones's important 2000 article on a theoretical framework of racism as told through garden imagery.) Braveman et al. end the article referencing Sen's capabilities approach and Rawls's theory of distributive justice, arguing that emphasizing human rights strengthens a conceptualization of health disparities and leads to an actionable approach to achieving health equity. "The relevant ethical and human rights principles support prioritizing attention to those facing the greatest obstacles," they write. "The struggle for

[13] Bailey et al. 2017
[14] Cogburn 2019

racial justice, in which efforts to eliminate racial/ethnic disparities in health are crucial, has far more to gain than to lose from making these principles explicit." People fighting for racial justice know it is necessary to make the principles of equality and human rights explicit and know it is necessary to argue that eliminating health disparities is crucial to the struggle for racial justice. But Braveman et al. never specify that racism, not race, is a major driver of health disparities. Their article fails to acknowledge that racist policies are upheld and buttressed by those with the most social advantage. The authors invisibilize the people and institutions who perpetuate the status quo of White supremacist structures and systems. Similarly, the role of racism (and not just demographic differences) in health is frequently glossed over or not named directly.

Racist institutional policies in one part of the US government have consequences in other parts of the government; this connection between and dispersion of racist policies is what is meant by structural racism.[15] Structural racism results in identifiable pathways between institutional racism and health. Legislation that passed in the 1930s as part of Roosevelt's New Deal, including the Fair Labor Standards Act and the Social Security Act, deliberately excluded farmworkers and domestic workers – not coincidentally, industries with a predominantly Black and Brown workforce. This negatively affected Black families' working conditions and financial stability, not to mention their ability to create intergenerational wealth. Immigration policies have been racist since they came into being with the Chinese Exclusion Act of 1882. On the macro level, structural racism is most pronounced and visible in housing segregation.[16] Housing segregation may no longer be de jure, but it still has very real health consequences. Housing determines access to good educational systems, culturally sensitive healthcare providers, healthy

[15] Bailey et al. 2017
[16] Bailey et al. 2017

and appropriate food options, and reliable public transportation, all of which work together to foster health.

Public health professionals must be mindful of the important distinction between institutional and structural racism. Structural racism is "the totality of ways in which societies foster discrimination, via mutually reinforcing systems" like housing, education, employment, and healthcare.[17] Institutional racism refers to specifically race-based antagonistic policies that may be overt or subtle, such as increased car insurance premiums based on zip code or workplace dress codes barring certain hairstyles. Most health disparities research that purports to be about racialized disparities focuses on interpersonal racism and perceived mistreatment, not structural racism.[18] While microaggressions that happen on the individual level are meaningful, the macro-level aggressions of structural racism are increasingly understood to be a central determinant of population health.

Link and Phelan argued in 1995 that socioeconomic status (SES) is a fundamental cause of inequalities in health. Their theory posits that SES is so durable an influence that it affects health and disease in four ways: 1) SES influences a variety of diseases; 2) SES affects disease outcomes through several risk factors; 3) SES determines access to resources that could be used to mitigate disease risk; and 4) SES is reproduced over time.[19] Fundamental causality is a kind of causal relationship in which the independent variable affects the dependent variable even when the pathways from independent to dependent change or are disrupted.

In 2015 Link and Phelan asserted that racism is also a fundamental cause of health inequalities. This is because the independent variable (SES or racism) embodies and is embodied

[17] Bailey et al. 2017
[18] Bailey et al. 2017
[19] Phelan et al. 2010

by a set of "flexible resources" that vary and respond to disruptions or challenges to their operationalization. Higher SES means access to resources that can continually adapt to new pathways; the direct, positive relationship between SES and the dependent variable of health means SES is an enduring, fundamental cause. Higher SES grants people the flexible resources necessary to tackle illnesses that cause death or disability, even as the specific disabling illnesses themselves change. People with high SES are more able to know about risks, change behavior, or change location in order to avoid the causes and mitigate the consequences of disease, whether they face typhoid or Covid-19. Racism is independently associated with health disparities because racism is associated with inequalities in power, freedom, place of residence and work, and access to healthcare. Phelan and Link (2015) explain how racism is a fundamental cause because of the flexible resources that systemic racism affords to Whites in the form of institutional and structural factors (White domination in commerce, education, healthcare, and government), individual resources (wealth, social connection), and social psychological advantages (beliefs that Whites are the natural default and non-Whites are the Other). Whites holding power results in policies that perpetuate Whites holding power, and being in power generates ample and varied resources, which in turn "facilitate[s] the reproduction of SES inequalities by race."[20]

Examples of how racism is a fundamental cause are evident in how racist power structures – and White power – are perpetuated even after official, state-sanctioned action is taken to address the racist power. The Tuskegee Experiment, a marquee example of structural racism in healthcare, began in 1932 as a study of untreated syphilis. The study recruited Black men with syphilis and denied them treatment, going so far as to prohibit doctors screening men

[20] Phelan and Link 2015

for military service during World War II from providing treatment.[21] The study continued until 1972 – perhaps the prime example of unchecked, unchallenged institutional racism. Whether through Constitutional amendment, federal legislation, or Supreme Court decision, White supremacy is insidious and not easily undone. Figures 1-3 show how racism acts as a fundamental cause.

Figure 1: From enslavement to subjugation.

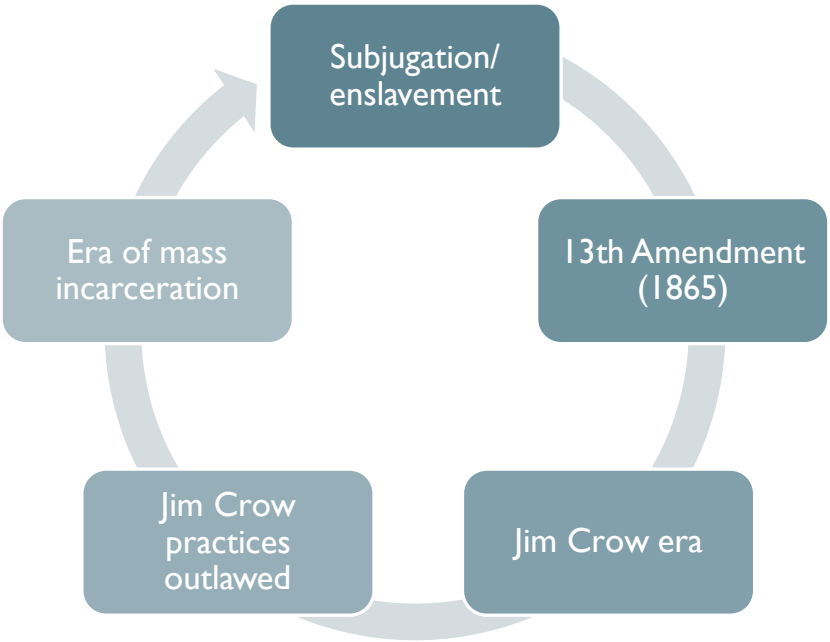


Figure 1 shows the pathway from enslavement to mass incarceration and subjugation. Although slavery was outlawed with the 13th Amendment, violence and terror were continually inflicted on Black populations during the Jim Crow era. Restrictions on overt racial violence and other Jim Crow practices after the Civil Rights movement meant that White supremacy needed another way to dominate, hence the expansion of the carceral state with harsher sentencing in the criminal justice system. This resulted in mass incarceration.

[21] Brandt 1978

Figure 2: Segregation in education.

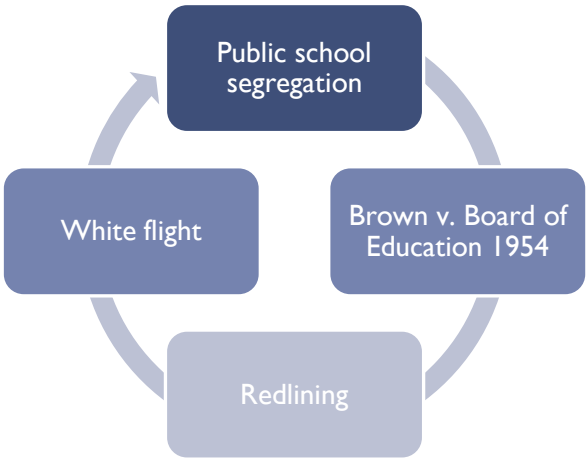


Figure 2 shows the relationship between discriminatory housing practices and school segregation. Even after the Supreme Court decision in *Brown*, schools remained or became segregated in some places due to redlining and White flight. Some federal programs like Moving to Opportunity and bussing were successful, but they worked on an individual scale.

Figure 3: Voter disenfranchisement.

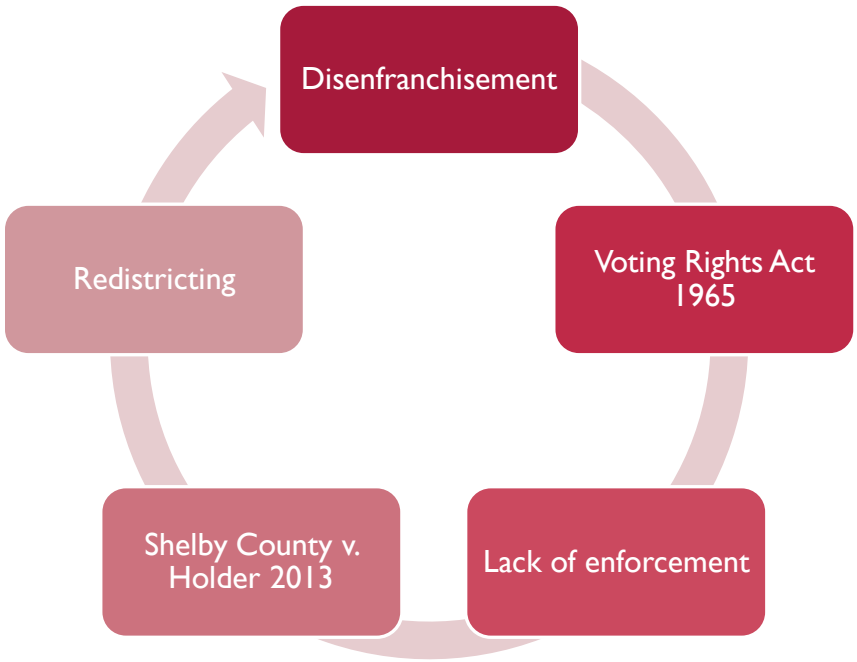


Figure 3 shows the cycle from disenfranchisement to the Voting Rights Act of 1965 and back again. The legislation is undermined by the Supreme Court's 2013 decision in *Shelby County v. Holder* to dispense with some of the key parts of the decision from almost 50 years prior, allowing states and municipalities to institute voter ID laws and other forms of modern-day poll taxes. These regulations, coupled with Gerrymandered redistricting (and mass incarceration), cause disenfranchisement anew.

Just as the fundamental causes of SES-driven differences in health cannot be solved by addressing proximate factors, racial inequalities in health cannot be solved by addressing proximate risk factors.[22] Racism itself must be addressed. Fundamental causes of health disparities will not be overcome by only addressing "intervening mechanisms" because the enduring inequality in money, power, and social connections means that mechanisms are continually replaced.[23] However, by reducing inequalities in who has access to and is able to use flexible resources, long-term impacts of fundamental causes may be lessened.

Cogburn (2019) emphasizes the necessity of understanding racist culture in order to understand how racism – not race – undergirds health disparities. A 2016 study found that medical students and residents had an alarmingly high percentage of beliefs in false biological differences between Black and White people, including on pain sensitivity, blood clotting, and skin thickness.[24] Race is a social construct, not a biological one, and this should disabuse health professionals of these egregious misconceptions. But the power of racism means that undoing learned, entrenched, accepted ideas, ideas that are repeated in media coverage and twisted to remove blame or responsibility from White supremacist institutions and individuals, is immensely challenging.

One way to interrupt the fundamental cause pathway of both racism and SES may be the provision of universal healthcare coverage. This would lessen the disparity in access to care by removing financial barriers that prohibit people from seeking and obtaining competent healthcare. The health insurance system as it is currently designed prohibits people from

[22] Phelan and Link 2015; Cogburn 2019
[23] Phelan and Link 2015
[24] Hoffman et al. 2016

accessing the care they need. As is evident by the current difficulty in making an appointment for the Covid-19 vaccine, social position affects access to care.

Results

Coverage Under the Affordable Care Act

The Patient Protection and Affordable Care Act (ACA), which President Obama signed into law in 2010 and which took effect in 2014, created subsidies to purchase private insurance in the form of advance payment tax credits (APTC) for people with incomes at 139% to 400% of the federal poverty level (FPL).[25] The ACA would also have expanded Medicaid throughout the country; although Medicaid eligibility is determined by each state, the ACA would have provided federal funding to expand eligibility to a uniform baseline level of 138% FPL, at which point people would be eligible for APTC.[26] However, in 2012 the Supreme Court ruled against mandatory Medicaid expansion, limiting the scope and effect of the ACA.[27]

Prior to the ACA taking effect, in 2013, nearly 19% of the total nonelderly adult population was uninsured; this translates to 13% of White adults and 26% of adults of color and includes 39% of all Latinx adults and 21% of Black adults.[28] As of 2017, 32 million nonelderly adults were uninsured, 27% of whom were eligible for Medicaid and 22% of whom would have been eligible for APTC.[29] By 2019, 8% of the nonelderly adult population (26.1 million) did not have health insurance at any point, and slightly more (9.2% or 29.6 million) did not have coverage at the time of the interview.[30] The uninsured rate was nearly twice as high in states that did not expand Medicaid (18.4%) as in states that did expand Medicaid (9.8%). In non-expansion

[25] Kominski et al. 2017; Artiga et al. 2015
[26] Artiga et al. 2015
[27] Kominski et al. 2017; Brooks-LaSure 2020
[28] Artiga et al. 2015; Vistnes and Lipton 2017
[29] Kominski et al. 2017
[30] Keisler-Starkey and Bunch 2019

states, 36.4% of people below 100% FPL lacked insurance. While the uninsured rate in every state decreased from 2010 to 2019, the uninsured rate actually increased in 19 states from 2018 to 2019.[31] Since 2013, the number of adults without insurance has steadily decreased, as shown in Table 2.

Year	Adults without insurance, in millions	Percent of adult population without insurance	Source
2013	35.6	19%	
2015	32.9	12.2%	
2017	30.1	11.1%	
2018	27.9	10.4%	
2019	26.1 / 29.6	8% / 9.2%	Census / ACS

Table 2: Number and percent of uninsured nonelderly adults during select years 2013-2019.

People without insurance use half as much healthcare services than those with insurance, and studies show they may be more likely to have undiagnosed co-morbidities.[32] Several studies have shown that not having health insurance is associated with poor health outcomes, due to lack of access to healthcare and preventative services, and even death.[33] Unsurprisingly, low-income adults with insurance have better access to care (in the form of increased preventative visits, increased likelihood of having a usual source of care, increased prescription drug adherence) and report better outcomes (improved rates of diagnosis and treatment for chronic conditions, improved depressive symptoms, higher self-reported health) than low-income adults who are uninsured.[34]

When the ACA passed, 20% of the uninsured population was between 19 and 30 years old.[35] Young peoples' health is an indicator of what the population's health will be in the future.

[31] Keisler-Starkey and Bunch 2019
[32] Galvani et al. 2017
[33] Sommers et al. 2017
[34] Cai et al. 2020; Sommers et al. 2017
[35] Chen et al. 2015

Similarly, their health spending patterns are likely to affect long-term health spending. Lack of insurance among young adults may mean lack of access to healthcare, putting off necessary treatment, or not seeking care at all, and result in health problems down the road and greater health expenditures.[36] Increased healthcare utilization by uninsured young adults would likely mean increased use of preventative services, which would result in better health and lower costs in the long run.[37]

Expansion of dependent coverage showed early evidence of racial disparities in individual healthcare spending under the ACA. Compared with White young adults, Black and Latinx young adults had a lower prevalence of health insurance coverage before the ACA: one-third of Black and more than 50% of Latinx young adults age 20-29 were uninsured in 2008 and 2009, compared with 25% of White young adults.[38] However, Black and Latinx workers are less likely to have employer-sponsored insurance (ESI) to begin with, so expanding coverage to young adult dependents may not make a large impact on this group.[39] The ACA expansion to dependents was most financially meaningful for those with ESI; people who had a large opportunity cost in paying premiums under the ACA and were not eligible for public insurance would not have benefitted from the dependent expansion.

Some of the uninsured would have been eligible for coverage under the Medicaid expansion and some would have received APTC. These different pathways to eligibility come with their own barriers to implementation, and present different barriers to obtaining insurance. Aside from lack of Medicaid expansion, additional barriers to enrollment include misperception

[36] Chen et al. 2015
[37] Cai et al. 2020
[38] Chen et al. 2015
[39] Chen et al. 2015

of the cost of coverage, lack of information on eligibility, and difficulty completing the enrollment process, including language barriers.[40]

People who make less than 139% FPL do not qualify for APTC; if they are also ineligible for Medicaid (either because their state has not expanded eligibility or they do not meet income restrictions), they fall into the "coverage gap." Median Medicaid eligibility limits in 2015 were 44% FPL, or under $9,000 for a family of three.[41] The APTC starts at 139% FPL, so adults who do not qualify for Medicaid but earn less than 139% FPL have no subsidized insurance option. Marketplace subsidies end at 400% FPL, which was $47,000 for one person in 2015.[42] But people who make more than 400% FPL may not be able to afford the full cost of monthly health insurance premiums. In 2019, the American Community Survey began to ask respondents about their receipt of subsidized Marketplace coverage, and found that 2.23% of the population (9.7 million people) received APTC; excluding people who have an additional source of healthcare coverage, 1.63% of the population (5.28 million people) received APTC.[43] In 2015, 22 states refused to accept federal dollars to expand Medicaid, leaving 3.7 million adults in those states in the coverage gap.[44] By 2017, the number of adults in the coverage gap had decreased to slightly below 3 million.[45]

Of the adults in the coverage gap, almost 90% live in the South, and around 50% live in Florida or Texas.[46] More than one-quarter of all uninsured adults live in states that did not expand Medicaid. This number rises to 34% for Black adults, who disproportionately live in

[40] Kominski et al. 2017
[41] Artiga et al. 2015
[42] Artiga et al. 2015
[43] Hernandez-Viver and Berchick 2020
[44] Artiga et al. 2015
[45] Kominski et al. 2017
[46] Kominski et al. 2017

Southern states that did not expand Medicaid.[47] These Southern states have conservative state legislatures, put in place via voter disenfranchisement and redlining. The coverage gap contributes to disparities in healthcare and is a consequence of structural racism.

Still, the ACA has been successful in its goals of increased utilization of and access to healthcare, and better overall health. A 2017 study found Medicaid expansion has been associated with a 7.4% increase in insurance coverage among low-income adults and a perception of improvements in healthcare.[48] Lack of care due to cost, including skipping medication, as well as paying for medical bills and annual out-of-pocket (OOP) spending, decreased significantly among adults up to 100% FPL and 139-199% FPL.[49]

On utilization, the ACA has resulted in significant increase in outpatient care, including the likelihood of having a routine check-up among nonelderly adults, having dental care or cancer screenings, and obtaining preventative care, such as glucose checks for people with diabetes.[50] This analysis did not find records of changes in emergency department visits, but cited a decrease in hospital stays among the uninsured, showing that the ACA reduced inpatient care for which hospitals were not compensated. On overall health impacts, the analysis found improvement in self-reported health among all nonelderly adults after one year; one study that showed that the health of adults on the precipice of Medicare eligibility improved to the level of insured adults once they gained Medicare coverage, implying that a similar process would happen for uninsured adults who gained coverage under the ACA. However, several studies did not demonstrate a statistically significant difference in having a usual source of care, in cost-related delays in seeking care, in paying for care, or in making appointments with preventative or

[47] Artiga et al. 2015
[48] Kominski et al. 2017
[49] Kominski et al. 2017
[50] Kominski et al. 2017

specialty providers.[51] Problems with access are more common among low-income, minority, female, and sicker adults, and in states that did not expand Medicaid.[52]

According to Medical Expenditure Panel Survey (MEPS) data, in 2019, 99% of employees at private-sector companies with more than 100 employees had the option to purchase group health insurance through their employers, while only 50.7% of workers at private companies with fewer than 50 employees had the option of purchasing ESI. The overall rate of eligibility for ESI was just above 85%. In 2019, 47.6% of private-sector employees were enrolled in ESI, a share that has been trending downward since 2006.[53] But having paid employment does not correlate ESI eligibility. Private companies with more than 100 employees may tie eligibility for ESI to number of hours worked (especially for low-wage, hourly positions in retail and food service) but them limit the hours the employee is permitted to work. Who works at the firms that provide substantial ESI? Americans working higher-paid jobs are more likely to be eligible for ESI, while marginalized Americans are left purchasing expensive plans or cobbling together several part-time jobs and remaining under the threshold of ESI eligibility.[54]

In 2015, one year after the ACA took effect, 32.9 million nonelderly adults remained uninsured, but by 2017, this decreased to 30.1 million; the uninsured rate fell from 12.2% to 11.1%.[55] However, the uninsured rate did not decline among the Black population, so the share of uninsured people made up by African-Americans increased from 13.7% to 15%. In 2017, 25% of the uninsured were eligible for Medicaid and 10.4% were below 200% FPL. These two subpopulations, representing 35.4% (10.6 million) of the uninsured, have other characteristics

[51] Kominski et al. 2017
[52] Kominski et al. 2017
[53] MEPS 2019
[54] Johnston et al. 2020
[55] Blumberg et al. 2018

that make them likely effective targets for outreach: they have high rates of children in school and receipt of non-health-related public benefits, meaning they have several avenues through which they can receive messaging about enrolling in Medicaid or receiving APTC.[56] However, those ineligible for APTC grew from 12.8% of the uninsured in 2015 to 15.5% in 2017. As of January 2020, 14 states still had not expanded Medicaid, leaving 4.4 million people without insurance.[57] The Trump administration proposed imposing work requirements for Medicaid eligibility; a 2019 study on the consequence of work requirements in Arkansas found that around 17,000 people lost coverage in just three months.[58] Means-tested programs that impose work requirements are way for institutions to restrict access, with predictable consequences: less care for marginalized Americans.

Healthcare Spending

In 2010, before the ACA took effect, total healthcare spending was $1.263 trillion, spread over 84.6% of the population (261.1 million people).[59] This is equivalent to a mean of just over $4,800 per person and a median of just over $1,200, indicating that a small number of people had very high medical expenses. For people over age 65, the mean rises to $10,300 compared to $3,900 for people below 65 – greater than 2.5 times larger. The mean for those under 65 with public insurance only was $4,500, for under 65 with any private insurance was $3,900, and for under 65 who were totally uninsured was $2,400.[60] The decreased cost borne by the uninsured does not mean they did not have health problems, though. On the contrary, the Oregon Health

[56] Blumberg et al. 2018
[57] Brooks-LaSure et al. 2020
[58] Brooks-LaSure et al. 2020
[59] Carper and Machlin 2013
[60] Carper and Machlin 2013

Insurance Experiment showed an average decrease of nearly $400 in medical bills sent to collection and a "virtual elimination" of catastrophic OOP expenses.[61]

Healthcare costs in 2018 were $3.6 trillion, or 17.7% of the economy, and 2.85 times more than in 2010.[62] These increased costs are partly due to increased utilization, but mainly due to higher healthcare prices and administrative inefficiency. The US pays 12%-15% more in billing and insurance administration than Canada, and per-capita drug spending in the US is 2.4 times the average of peer nations.[63] The Orphan Drug Act has incentivized development of drugs to treat small populations at exorbitant returns-on-investment for pharmaceutical companies. Major pharmaceutical companies had a 24% mean profit in 2019, compared to 9% for all Fortune 500 corporations.[64]

MEPS data show that average annual premium amounts have changed drastically from 2006. In 2019, average annual premiums paid by employers were around $7,000 for single coverage, $14,000 for employee-plus-one coverage, and $20,500 for family coverage. These amounts grew annually by 3.8%, 4.2%, and 4.7%, respectively, since 2006, increasing on the whole between 69% and 90%. In 2019, average annual employee premium contribution was $1,500 for individual coverage, $3,900 for employee-plus-one coverage, and $5,700 for family coverage, representing increases of 4.3%, 6.8%, and 5.4%, respectively, compared to 2018. The amount paid by employees has nearly doubled since 2006, from $800 for single, $1,900 for plus-one, and $2,900 for family to $1,500 for single, $4,000 for plus-one, and $5,700 for family coverage. The average deductible amount has also risen, from $700 to $1,900.[65] These costs have

[61] Sommers et al. 2017
[62] Cai et al. 2020
[63] Cai et al. 2020
[64] Cai et al. 2020
[65] MEPS 2019

grown substantially more than wages and inflation.[66] No wonder that even when ESI is offered, employees are loath to opt in.

In 2010, hospital inpatient care and ambulatory care (meaning hospital outpatient and office-based care) represented one-third of total expenses, and prescription medication was one-fifth of expenses.[67] Private insurance paid for 40%, Medicare paid for 25.7%, individuals paid for 14.2%, and Medicaid paid for 10.4% of total expenses. The proportion paid by Medicare grew to 63.2% for people 65 and older.[68] For 2014 and 2015, researchers found no change in total healthcare spending among Medicaid-eligible nonelderly adults (i.e., those below 139% FPL).[69] For 2016 and 2017, however, researchers found a 28% reduction in OOP and a reduced probability of "catastrophic financial strain," meaning OOP and premium costs added up to more than 40% of their post-subsistence income.[70] This implies that the ACA did reduce OOP for everyone and lessened the healthcare-based financial burden for low-income individuals.

Financing Universal Healthcare Coverage

Universal healthcare coverage would provide health insurance to those who do not have it, expanding healthcare access and rectifying access disparities. Cai et al. (2020) analyzed the costs and savings of 22 plans for single-payer healthcare proposed over the past two decades. "Single-payer" refers to plans that are entirely financed by the federal government or a non-profit government entity, provide a single set of comprehensive benefits to all, and engage in universal negotiation of provider reimbursement rates and prescription drug prices. These plans also eliminate private insurance companies and all major cost-sharing, although small co-pays of

[66] Johnston et al. 2020
[67] Carper and Machlin 2013
[68] Carper and Machlin 2013
[69] Gotanda et al. 2020
[70] Gotanda et al. 2020

around $10 are permitted.[71] Of these 22 plans, 19 predicted savings in the first year and 20 predicted savings over time. The analysis by Cai et al. (2020) did not make a requirement that all residents of the US become covered by the plans they assessed, but only that all so-called 'legal' residents are covered.

Analyzing these 22 plans, Cai et al. found a range of savings and costs, from a cost decrease of 15.5% to an increase of 7.2%. Cost and savings estimates for universal healthcare vary widely, based on differences in modeling, magnitude of increased utilization, whether drug prices are negotiated, whether private insurers are still permitted, and the scope of administrative savings. The median finding from the 22 plans was a net savings of 3.5%. Net savings includes both increased costs due to increased utilization and decreased costs due to simplified administration and lower drug prices. Increased utilization was modeled to lead to median increased costs of 9.3%, but median total savings, achieved through eliminating administrative redundancies, were 12.1%. Changes in drug formularies would produce savings of 30% for diabetes drugs alone. Financing single-payer relies on government spending in the form of increased taxes, so the cost of single-payer to individuals will be varied, as tax-based financing replaces regressive flat fees in the current system of insurance premiums and OOP.

Galvani et al. (2020) specifically focused on Senator Sanders's Medicare For All Act (MFAA), estimated to cost $3 trillion per year – considerably less than total healthcare spending of $3.6 trillion in 2018.[72] The federal government financed 64% of healthcare costs in 2018, or $2.3 trillion, representing 11% of the GDP.[73] Although establishing a single-payer plan would be costly, attempting to cover all adults by expanding the individual state Marketplaces under the

[71] Cai et al. 2020
[72] Galvani et al. 2020
[73] Cai et al. 2020

ACA or by expanding Medicaid eligibility would increase healthcare spending by $149 billion annually, bringing the cost of healthcare above the cost estimate for MFAA.[74]

MFAA generates cost savings in three main ways. First, it would reduce provider payments to the Medicare reimbursement level, which is around 80% of costs. Second, it would consolidate billing and administrative expenses, including eliminating unpaid bills, capping salaries, and minimizing fraud (fraud accounts for more than one-quarter of healthcare spending at $911 billion). Third, it would negotiate prescription drug prices, as the Bureau of Veterans Affairs is able to, resulting in formularies at 40% less than those in the non-negotiated market.[75]

To provide universal healthcare coverage without implementing a single-payer system would perpetuate redundancies in healthcare administration and management, and would be less efficient than instituting a single-payer plan. Galvani et al.'s analysis found that MFAA would save nearly $460 billion and 68,500 lives per year.[76] Based on the demographic maldistribution of who has access to healthcare, MFAA may particularly save the lives and improve the health of marginalized people who currently lack healthcare.

A meta-analysis of 34 studies compared healthcare costs and quality between the US and Canada, where universal healthcare is available to all Canadians. This study showed that Canadians had a 13% greater chance of receiving better healthcare and higher survival rates than Americans.[77] When controlling for SES, low-SES Canadians had a 36% greater chance of receiving better healthcare than low-SES Americans, as measured by survival outcomes and receiving the necessary treatments. This same study showed that Americans have more than twice the risk of long wait times for breast and colon cancer care. The authors found a causal,

[74] Galvani et al. 2020
[75] Galvani et al. 2020; Rowe lecture 2020
[76] Galvani et al. 2020
[77] Escobar et al. 2019

dose-response relationship between SES and the advantages of Canadian – i.e., universal – healthcare.[78]

Removing the burden of healthcare costs should, in theory, reduce income inequality. Christopher et al. (2018) calculated the Gini index for the United States population, before and after medical expenditures, to assess how paying for medical care affects income inequality. The Gini index ranges from 0 to 100, with 0 representing a perfectly even distribution of income among all members of the population, and 100 meaning only one person holds all the income. Before factoring out costs of medical care, researchers found the 2014 Gini index was 47.84; including medical costs, the Gini index increased to 49.21.[79] Their analysis showed that medical expenditures actually redistributed 1.37% of total income from lower-income individuals to wealthier individuals. (This represents a slight decrease in the redistribution from before the ACA took effect.) But medical expenditures in the form of OOP costs have risen, because deductibles, co-pays, and prescription drug prices have gone up. Marketplace coverage, especially, comes with high deductibles. Christopher et al. cite a Kaiser Family Foundation study showing that in the period of 2006-2018, ESI deductibles greater than $2,000 increased six-fold. The most common type of debt sent to collection agencies is medical debt. Medical expenses, including insurance premiums, disproportionately affect lower-income individuals.[80] If healthcare were funded by taxes on the very wealthy and came with no or very little OOP costs, income inequality would lessen for two reasons: one, because those with a higher share of the income and wealth would relinquish more of their wealth in the form of taxes, and two, because

[78] Escobar et al. 2019
[79] Christopher et al. 2018
[80] Christopher et al. 2018

those with lower share of the income would be relieved of their proportionally higher healthcare cost burden.

Universal healthcare is clearly beneficial. Single-payer healthcare systems appear to provide more support and protection as socioeconomic vulnerability increases.[81] A 2020 article estimated that universal healthcare coverage in the US would save 68,000 lives and 1.73 million life-years annually.[82] Eliminating future medical debt and providing single-payer insurance would reduce income inequality and health disparities based on access to healthcare.

Discussion

Multiple studies show that health insurance is correlated to better health outcomes.[83] Having health insurance means a greater likelihood of having a usual source of care or a primary care provider; care continuity are translates into earlier detection of disease and better access to preventative care.[84] Preventative care manifests positive results at the population level, so long-term consequences may be difficult to trace or even notice. However, as Sommers et al. point out, confounders may complicate the relationship between having health insurance and having good health because changes in insurance status frequently correlate with changes that affect healthcare utilization and outcomes. Having coverage does substantially improve patients' self-reported perceptions of their health, and self-reported health effects predict future reduced mortality over 5 to 10 years.[85]

"Social determinants of health" has become a buzzword, and academic associations, hospital systems, municipal health departments, and elite schools of public health are competing

[81] Escobar et al. 2019
[82] Galvani et al. 2020
[83] Gotanda et al. 2020; Kominski et al. 2017; Lantz and Rosenbaum 2020; Sommers et al. 2017
[84] Sommers et al. 2017
[85] Sommers et al. 2017

to show they are the most knowledgeable about these societal issues. But attempts to make a catch-all phrase signal awareness of structural racism, sexism, classism, and ableism fall flat when major determinants of health, such as access to health insurance, housing, education, work, and the built environment, remain unaddressed.

A social ecological model of health within a racist society could show how health is determined at every level, from the individual to the structural. The social ecological model, theorized by Bronfenbrenner and expanded upon by dozens of health promotion interventionists, conceptualizes a nesting set of relationships through which people act and experience the world. The social ecological model can be a tool for designing and implementing health interventions; each level both provides an entry point for staging an intervention and also correlates to likely best-fit interventions.[86] Some interventions straddle the levels of the model, reflecting the ability of one level to effect policy and the importance of policy uptake on another level. Visualizing how racist institutional and structural policies affect individuals through the social ecological model can help policymakers and public health professionals understand where to target interventions. A review of public health interventions showed that most were at the individual or interpersonal level, and some were at the social level.[87] Aiming interventions at the interpersonal or individual level will not be effective for improving the health of the whole population. Figures 4 and 5 show a social ecological model of racism and antiracism in health. Table 3 provides examples of how racism and antiracism operate at individual, interpersonal, social/organizational, institutional/environmental, and structural levels around healthcare.

[86] Golden and Earp 2012
[87] Golden and Earp 2012

Level	Policy and lived experience examples	Healthcare examples
Structural level	National political and economic factors that determine public policy. Structural determinants include the ACA and other health insurance policy; whether states expand Medicaid and/or offer clinics to undocumented residents; and the political climate of municipal, state, and the federal governments.	Access to healthcare
Institutional/ environmental level	State and local institutions and the built and natural environment, including air quality in residential and workplace neighborhoods, effects of climate change, access to transportation and quality of local resources, culturally appropriate food and grocery stores, and a safe place to live and play.	Do medical providers actively work to dismantle racist systems?
Social/ organizational level	Schools, workplaces, houses of worship, social clubs and groups that determine one's sense of habitus or rightful place in the world. Does school have enough funding? Is paid work available that supports one's standard of living, and are others of the same social status employed in that line of work? Are certain social groups or "lifestyles" stigmatized?	Work-life balance and spaces that support intersectional identities.
Interpersonal level	Family, relationships, social groups, and community values that influence the knowledge, attitudes, skills, and beliefs of your community.	How people foster and value the health of their community.
Individual level	One's own knowledge, skills, attitudes, and beliefs about the reality of racism and other oppressions they experience, and their sense of self-efficacy in implementing behavior change such as seeking healthcare. At the individual level, racist, sexist, homophobic, and ableist beliefs become internalized.	How people take care of their physical, mental, and emotional health.

Table 3: Levels of the social ecological model in healthcare.

Figure 4: Social ecological model of health in a racist society, with examples of racism in healthcare.

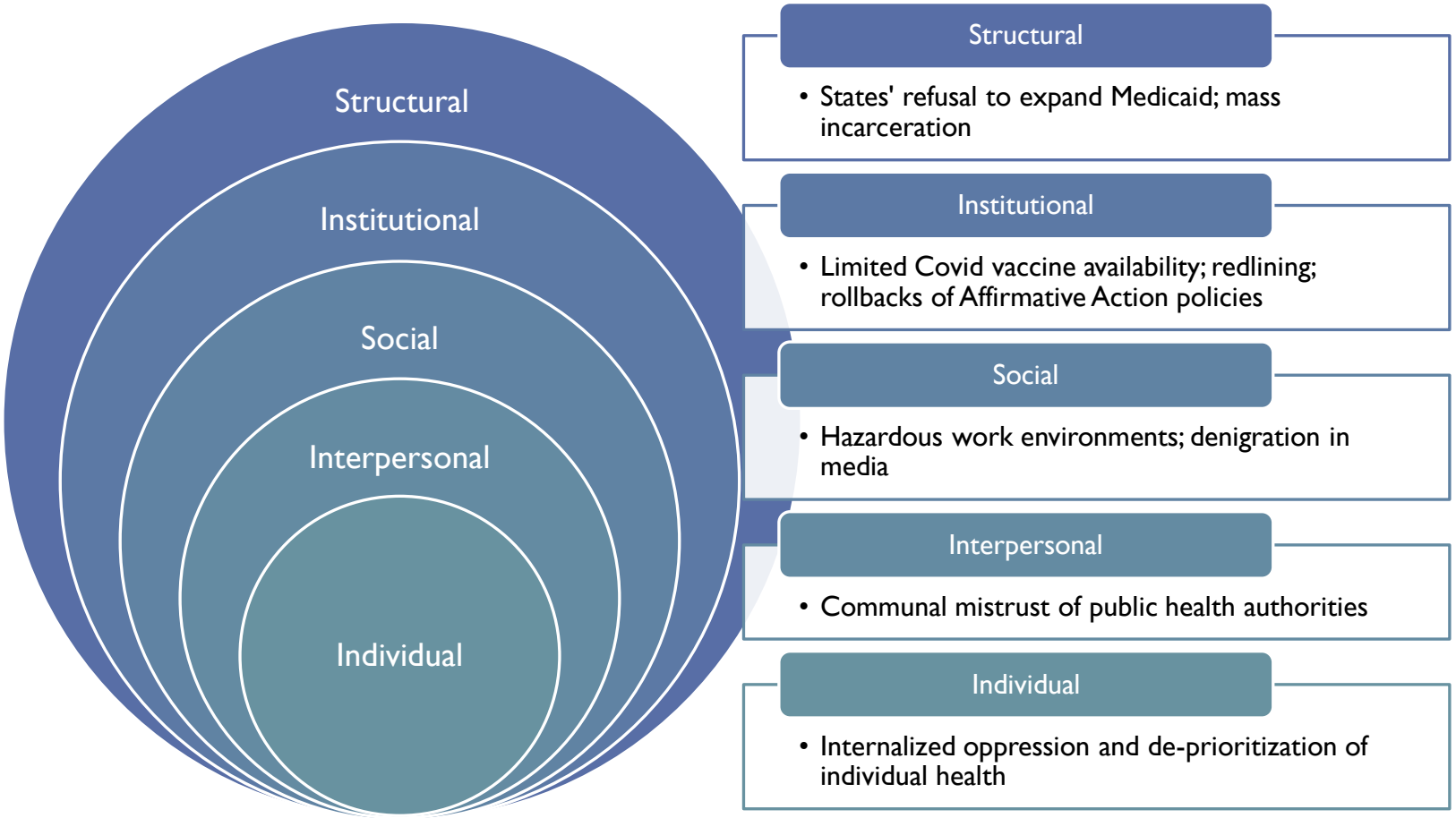
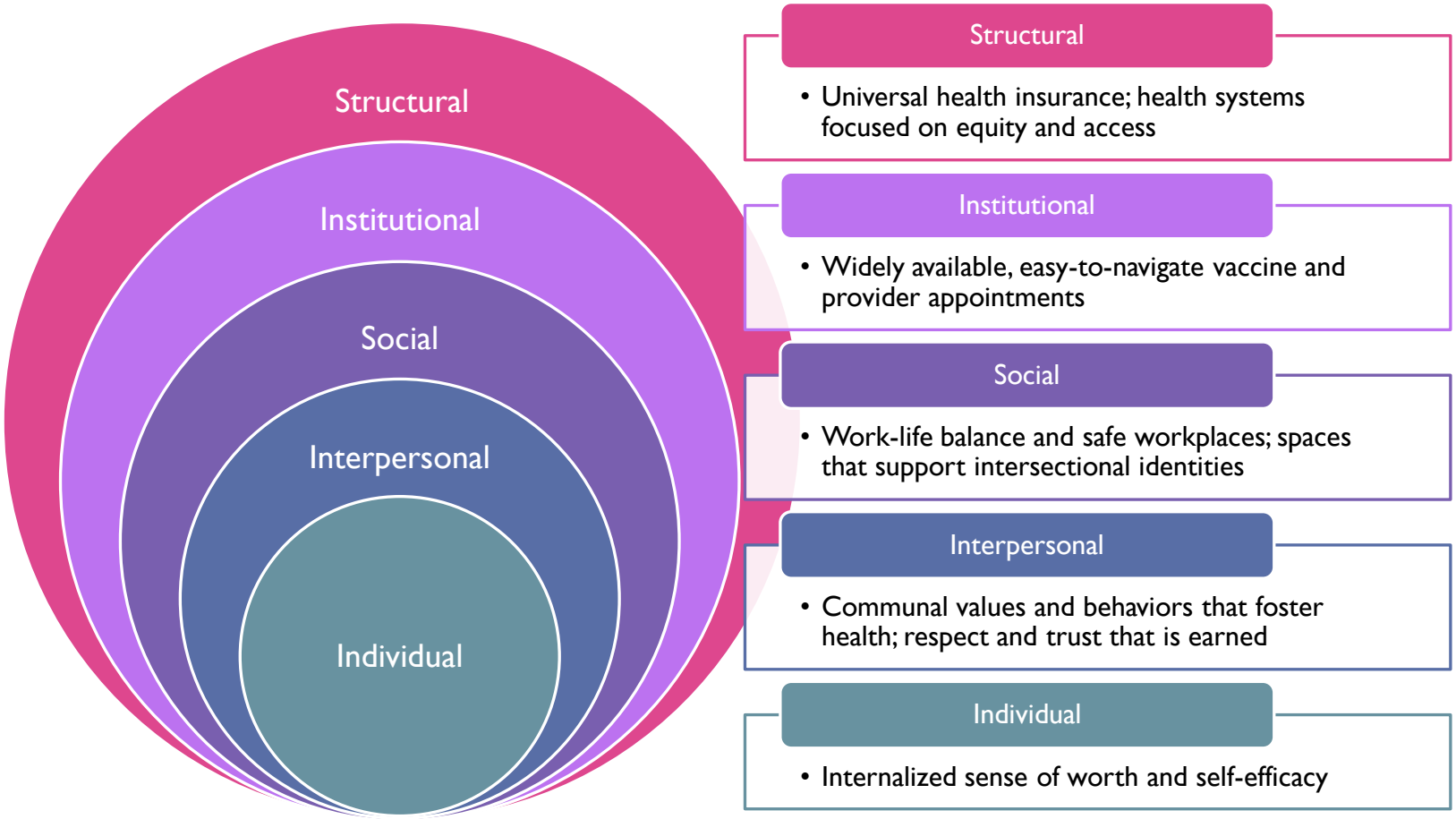


Figure 5: Social ecological model of health in an antiracist society, with examples of antiracism in healthcare.



As Figure 4 shows, the miasma of structural racism affects health at every level of the social ecological model. But another way is possible. Implementing antiracist values can shift the wider culture toward fostering health for all Americans.

Much has been made of "vaccine hesitancy" among Black Americans, but are they to blame for lower uptake? Covid-19 vaccine appointments are difficult to make, require a stable internet connection, ability to travel around the city, a flexible schedule, multiple accounts on different health systems' platforms, and a solid chunk of time to dedicate to searching for appointments plus knowledge of nuanced eligibility guidelines. The problem of varied vaccination rates is partly the lack of vaccine availability and partly that Americans of color have real, justifiable reasons for mistrusting the government. One article on the distribution of vaccines at the Washington Heights Armory showed that in the beginning, the vast majority of those receiving vaccines were White people who did not reside in the neighborhood.[88] Vaccines targeted at groups who are most affected by Covid – including people of color – often went to White people with greater access and resources. Similarly, having healthcare is important, but it may not be enough to counteract the other vectors of oppression that cause or contribute to worse health. Americans of color are overrepresented in some essential occupations that are at the highest risk of contracting Covid, including at nursing homes or as home health care workers, at meatpacking plants, in food service, and on construction sites. Black Americans are 13% of the population but twice that in some essential positions, including psychiatric aide, nursing assistant, and hospital orderly; Latinx Americans are 17% of the population and 30% of construction workers.[89] Working in essential workplaces and not being permitted to work

[88] Velasquez 2021
[89] Corey et al. 2020

remotely has increased the Covid burden among communities of color, and universal healthcare will not rectify that.

The pathways through which White supremacy re-asserts itself provide a glimpse at what may happen if universal health insurance does come into being. Scholars and policymakers can anticipate how White supremacy will push back within healthcare based on the ways it has pushed back against liberty, voting rights, housing protections, and Affirmative Action policies. The pushback to President Obama came, at the highest level, in the form of the election of an unashamed White supremacist to the presidency. Health was weaponized by the Trump in his jingoist, xenophobic terms for Covid-19. Universal healthcare may also be susceptible to co-opting for the benefit of White Americans and to the detriment of Americans of color. Perhaps unintended consequences of eliminating the private insurance industry will have a stronger impact on communities of color. Unforeseen consequences may occur but those risks are less than the benefits of providing health insurance to everyone.

Conclusion

Over the past 125 years, public health emerged as a field of study and implementation science. The early belief in a miasma of germs, coupled with xenophobic and racialized fears of germs, has powered the growth of the field of public health throughout the 20th Century. As we near completion of the first quarter of the 21st Century, how much can we say has changed in the way public health operates? Public health has a complex history, beginning with stigmatizing immigrants and slums as sites of self-arisen vectors of disease, to the willful denial of treatment to victims of the Tuskegee Institute's study, lead in drinking water in Flint and Newark, lead in paint in Baltimore and New York City, spraying DEET, and failing to regulate unsafe work environments. On the other hand, public health also led to the Surgeon General's report on the

dangers of smoking, contact tracing techniques for infectious disease spread, the elimination of smallpox and near-eradication of polio, fluoridated drinking water, and vaccination standards. By the middle of the 20th Century, the professionalization of medicine and a shift from folk healing practices to antibiotics like penicillin fundamentally altered American healthcare. These innovations and progressions have indisputably saved lives. But advances in healthcare did not translate to universal advances in health. Still, the miasma of structural racism pervades the United States, affecting health in ways that access to health insurance cannot overcome.

In the past year, public health was stretched to its limit as the novel coronavirus and Covid-19 tore through the world. Good health and heath equity are not achievable only through insurance coverage. Even with good insurance, there are still societal barriers to good health. A recent gaffe by the Journal of the American Medical Association shows how the medical profession continues to be disconnected from the lived reality of racism. JAMA produced a podcast featuring a discussion with the head of New York City's public hospital system, and tweeted promoting the podcast: "No physician is racist, so how can there be structural racism in health care?"[90] It goes without saying that there are racist physicians. But what is really remarkable about this tweet is how clearly it shows that the social media managers, the editors, JAMA, and the AMA only understand racism to exist at the individual and interpersonal levels, not the institutional or structural level. Countless people of color can provide anecdotes on their mistreatment at the hands of individual doctors and health systems in the aggregate; Serena Williams's brush with death during childbirth is only the most noteworthy recent example. The institutional and structural racism the podcast seeks to address is an inextricable part of the AMA itself, in the past and up to the present – as illustrated by the tweet! The AMA barred Black

[90] Antonovich et al. 2021

doctors from membership until the 1960s. As one editorial argues, rather than creating solutions to medical racism, American medicine (and groups like the AMA) have and continue to be part of the story of American medical racism.[91]

Providing free or extremely low-cost insurance with ready access to care that is culturally appropriate is a tall order. And universal healthcare will not, on its own, solve the problem of racism-based health disparities if our schools, workplaces, and communities do not also address inequity. The Biden-Harris administration has not signaled support for universal healthcare, but the recently passed Covid aid and stimulus law expands Medicaid access and increases APTC subsidies, an important part of expanding healthcare coverage. The Congressional Budget Office estimates that monthly Marketplace health payments for non-elderly adults earning around $60,000 could decrease from around $1000 to around $400, a substantial decrease.[92] The rollout will not be without snags, though; Americans must once again navigate state and federal health exchange Marketplace websites to either claim or reject APTC subsidies.[93] This will be more difficult for people who mostly access the internet on their phones or do not have tech-savvy help, advanced financial literacy, or English proficiency.

Health disparities exist between all groups of Americans: between Black, Brown, and White Americans; between high SES and low SES Americans; between women, transgender and gender non-binary people, and men; between people with stable jobs that provide tax-free health insurance benefits and those who are ineligible for health insurance subsidies; between people with physical and mental disabilities and people with no disabilities; in short, between all people who can be differentiated based on power. To face these current health disparities, policymakers

[91] Antonovich et al. 2021
[92] Stolberg 2021
[93] Sanger-Katz and Kliff 2021

need a common language. Before we can move towards becoming an equitable society, we must come to consensus on definitions for racism and antiracism, health equity, universal healthcare, and justice. These concepts are not novel to the field of public health, but prioritizing the health of the marginalized and dispossessed may be novel to policymakers. Affordable health insurance is a vital step on the road to health equity.

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